



**PATENT APPLICATION**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Kazuhisa KUNITAKE et al.

Application No.: 09/976,111

Filed: October 15, 2001

For: FUEL REFORMING APPARATUS AND METHOD OF CONTROLLING SAME

Group Art Unit: 1764

Examiner: B. Ridley

Docket No.: 110497

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**RESPONSE TO RESTRICTION/ELECTION OF SPECIES REQUIREMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In a Restriction/Election of Species Requirement mailed April 30, 2003, a Restriction was required between Group A (claims 1-24) and Group B (claims 29-37). Further, an Election of Species was also required between species (i) through (viii).

I. Restriction of Requirement

In response to the Restriction Requirement, Applicants hereby provisionally elect Group A (claims 1-24). This election is made with traverse. Applicants respectfully request reconsideration and withdrawal of the Restriction Requirement.

The Restriction Requirement states that "inventions B and A are related as process and apparatus for its practice... In this case, the process as claimed can be practiced by another materially different process, such as one wherein the steam reforming reaction and the partial oxidation reaction do not occur at the same time (by a reactor which is not an autothermal reformer)."

Claim 1 of Group A recites a fuel reformer apparatus for reforming a raw fuel containing a hydrocarbon-containing compound so as to produce a hydrogen-rich fuel gas for use in a fuel cell. Claim 29 of Group B recites a method of controlling a reformer that reforms a raw fuel containing a hydrogen-containing compounds so as to produce a hydrogen-rich fuel gas for use in a fuel cell. Accordingly, it is respectfully submitted that the fuel reforming apparatus cannot be made by another materially different process other than controlling a reformer that reforms a raw fuel, as recited in claim 29.

According to MPEP § 803, there are two requirements that must be met before a proper restriction requirement may be made. These two requirements are: "the inventions must be independent or distinct as claimed; and there must be a serious burden on the examiner if restriction is not required..." (emphasis added). Applicants respectfully submit that the Office Action has failed to establish either the first or the second requirements as set forth in MPEP § 803.

Further, Groups A and B are directed to a reformer that reforms a raw fuel. Applicants respectfully submit that the search of the claims of Group A would encompass a search for the subject matter of Group B. Accordingly, the search and examination of the subject matter Group A would encompass a search for the subject matter of Group B and any additional search would not impose a serious burden upon the examiner.

It is therefore respectfully asserted that the search and examination of the entire application cannot be made without serious burden. MPEP § 803 states that "if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims two distinct or independent inventions." (emphasis added). Because Applicants have elected Group A, directed to the fuel reformer apparatus, a further search and examination of Group B, directed to method of

controlling a reformer that reforms a raw fuel, will not place a serious burden upon the examiner.

For at least these reasons, and in order to avoid unnecessary delay and expense to the Applicants and duplicated examination by the Office Action, it is respectfully requested that the Restriction Requirement be reconsidered and withdrawn.

## II. Election of Species Requirement

In response to the Election of Species Requirement, Applicants hereby provisionally elect Species i. The election is made with traverse.

In further response to the Election of Species Requirement, Applicants respectfully assert that at least claim 1 is generic to the elected species. Further, Applicants respectfully assert that at least claims 1, 2, 4, 14, 16, 17, and 23 read on the elected species.

Applicants traverse the election of species requirement on the ground that the generic claim is not so broad as to place an undue burden on the Examiner to search and examine the full scope of the claims. Rather, Applicants respectfully assert that a search and examination of the entire application could be conducted without undue burden on the Examiner, thus, avoiding delay and expense to Applicants.

Further, as set forth in 37 C.F.R. § 1.146, a reasonable number of species are permitted in a single application. The application contains a reasonable number of species and examination of all the species together in one application will not place an undue burden on the examiner. It is respectfully submitted that the election of species requirement is improper in view of the fact the number a reasonable number of species are set forth in this application. The Examiner is respectfully requested to reconsider the election of species and act on all the claims in the application.

III. Conclusion

Early and favorable consideration of the application are respectfully requested.

Should the examiner have any questions regarding the application, or any suggestions to expedite prosecution, he is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



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JAO:DXC/brc

Date: May 30, 2003

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